

REMARKS

The Office Action dated September 14, 2009 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-7 have been amended to more particularly point out and distinctly claim the subject matter of the present invention. Support for the claim amendments can be found on, at least, Fig. 4 of the subject application. No new matter has been added. Accordingly, claims 1-7 are currently pending in the subject application.

In view of the above amendments and the following remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending rejection to the claims for the reasons discussed below.

Interview Summary

The Applicants respectfully thank the Examiner for clarifying that U.S. Patent No. 6,243,623 is relied on to reject claims 1-7 and not U.S. Patent No. 6,920,374. Therefore, the remarks presented below address the rejection of claims 1-7 in view of U.S. Patent No. 6,243,623.

Rejection under 35 U.S.C. § 102

Claims 1-7 were rejected under 35 U.S.C. § 102(e) as being anticipated by Takenaka (U.S. Patent No. 6,243,623). In particular, the Office Action asserted that Takenaka discloses each and every feature recited in claims 1-7. Applicants respectfully

submit that claims 1-7 recite subject matter which is neither disclosed nor suggested in the cited prior art.

Claim 1, upon which claims 2-7 are dependent, recites a leg type mobile robot. The robot includes a body and legs each connected to the body via a first joint. The robot also includes feet, each connected to an end part of the leg via a second joint. Each foot includes at least one foot portion, which has a ground area to be grounded on a floor surface at a bottom thereof. Each foot also includes a floor reaction force detector configured to detect a floor reaction force acting from a floor surface through the foot portion. A center of the second joint is offset against a position in a plane view. The position is the position where a distance to a remotest point of at least one ground area becomes minimum. A center of the floor reaction force detector is closer to the position than to the center of the second joint in a plane view.

As will be discussed below, Applicants respectfully submit that Takenaka fails to disclose each and every feature recited in claims 1-7.

Takenaka is related to a leg type mobile robot control apparatus. In particular, Takenaka generally describes a control system for a legged mobile robot to ensure control of the actual floor reaction force acting on the robot (*See* Takenaka at col. 3, lines 18-23).

In contrast, claim 1 recites that the “center of the second joint is offset against a position in a plane view.” Because of this offset, “a center of the floor reaction force

detector is closer to the position than to the center of the second joint in a plane view” (claim 1, lines 13-15).

Takenaka cannot disclose the above-quoted feature of claim 1, because Fig. 2 of Takenaka illustrates that the center of joint 18R(L) is in line with a center point of a force sensor 44, which is in line with the center point of the foot. Because the center of joint 18R(L) of Takenaka is in line with the center point of the foot, the center of joint 18R(L) cannot be interpreted to be offset against the center point of the foot. In other words, the center of joint 18R(L) in Takenaka cannot “offset against a position ... [whose] distance to a remotest point of at least one ground area becomes minimum.” See, for example, claim 1, lines 10-12. Because center of joint 18R(L) in Takenaka is not offset against the center point of the foot, Takenaka cannot disclose that “a center of the floor reaction force detector is closer to the position than to the center of the second joint in a plane view.”

Furthermore, the Office Action merely relied on the Figures in Takenaka to disclose the above-quoted features. However, it is impossible to determine from the Figures in Takenaka alone as to whether the features recited in claim 1 are disclosed or suggested. Because the description related to the Figures in Takenaka is silent as to the particular alignment of the ankle joints 18R(L), sensor 44, and the foot, Takenaka cannot be relied on to disclose the above-quoted features of claim 1. For example, the description of Takenaka in support of Fig. 2, for example, does not disclose how “center

of a second joint is offset against a position.” Therefore, the drawings in Takenaka alone cannot be relied on to anticipate the above-quoted features of claim 1.

Furthermore, even if Fig. 2 of Takenaka were measured by an eye in a side view, the center of a second (ankle) joint of Takenaka would be interpreted to be in line with the center of the floor reaction force detector (and the position). Therefore, as discussed above, Takenaka cannot disclose “a center of the floor reaction force detector [being] closer to the position than to the center of the second joint in a plane view,” because the center of joint 18R(L) of Takenaka is in line with a center point of a force sensor 44.

Applicants respectfully submit that under U.S. Patent Law, “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” (*See* MPEP § 2131, citing to *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). Further, U.S. Patent Law requires that “[t]he elements must be arranged as required by the claim...” *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). Because Takenaka does not disclose each and every element as required by claim 1, the Office Action fails to establish that claim 1 is anticipated by Takenaka.

Therefore, for at least the reasons stated above, Applicants respectfully submit that claim 1 patentably distinguishes over Takenaka.

Claims 2-7 includes the patentable features of base claim 1 by virtue of their dependency. Therefore, Applicants respectfully submit that claims 2-7 patentably

distinguish over Takenaka for at least the same reasons as base claim 1, and for the specific limitations recited therein.

Accordingly, withdrawal of the rejection is respectfully requested.

Conclusion

In light of the above, Applicants respectfully submit that the above claim amendments and remarks further distinguish the claims over the cited reference. For at least this reason, Applicants respectfully submit that the subject application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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